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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)



Applicant's or agent's file reference NO 7029/WO/PCT/1	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/EP 03/10733	International filing date (day/month/year) 26.09.2003	Priority date (day/month/year) 27.09.2002
International Patent Classification (IPC) or both national classification and IPC A23F5/18		
Applicant NESTEC S.A. et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 7 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☒ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 09.01.2004	Date of completion of this report 02.08.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Couzy, F Telephone No. +49 89 2399-7503 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/10733**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-33 as originally filed

Claims, Numbers

1-33 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 30, 33

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 30, 33 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 30, 33

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:

☐ restricted the claims.

☐ paid additional fees.

☐ paid additional fees under protest.

☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

☐ complied with.

☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

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- ☐ all parts.
- ☒ the parts relating to claims Nos. 1-19, 31-32 .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	2-6, 11-13, 22-24, 26-29, 31
	No: Claims	1, 7-10, 14-21, 25, 32
Inventive step (IS)	Yes: Claims	3-6, 13, 23-24, 26
	No: Claims	1, 2, 7-12, 14-22, 25, 27-29, 31-32
Industrial applicability (IA)	Yes: Claims	1-29, 31-32
	No: Claims	

2. Citations and explanations

see separate sheet

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**INTERNATIONAL PRELIMINARY
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International application No. PCT/EP 03/10733

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claims 30 and 33 relate to products which are defined by their performances during storage (claim 30) or by the efficacy of the stabilization treatment (claim 33), instead of being defined in terms of the technical features of the product itself which allow to obtain such results. That subject-matter is thus so unclear (Art. 6 PCT), that it was not searched and can not be examined.

Re Item IV

Lack of unity of invention

II. Lack of unity

In accordance with the International Search Report, the following two groups of inventions have been identified:

- 1) Claims 1-2+, 3-6, 8+, 10+, 10+, 12+, 13, 14-24+: process for stabilizing a coffee aroma by reversably contacting it with a stabilizer during its manufacture, and the stabilized product is then stored after removal of the stabilizing agent.
- 2) Claims 1-2+, 7, 8+, 9, 10+, 11, 12+, 14-24+, 25-29, 31-32: process for the stabilization of a coffee aroma providing component, where the product is stored in the presence of the stabilizing agent which is incorporated in a non-miscible material, that material being removable from the coffee product or attached to the container, and the corresponding packaged coffee product.

(+: partial)

The present report covers all claims, however lack of unity in the sense of R. 13.1 PCT is present and should be remedied at a later stage.

Re Item V

**INTERNATIONAL PRELIMINARY
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International application No. PCT/EP 03/10733

Reasoned statement under Art. 35 (2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

V.1 Reference is made to the following documents:

- D1: DATABASE WPI Derwent Publications Ltd., London, GB; AN 1984-008632 XP002268483 'Coffee packaging - by treating with ferrous cpd., alkali or alkaline earth metal hydroxide and alkali metal sulphite' & JP 58 203865 A (TOPPAN PRINTING CO LTD), 28 November 1983 (1983-11-28)
- D2: US-A-5 364 555 (ZENNER BRUCE D ET AL) 15 November 1994 (1994-11-15)
- D3: EP-A-0 328 336 (GRACE W R & CO) 16 August 1989 (1989-08-16)
- D4: US-A-4 287 995 (MORIYA TAKEHIKO) 8 September 1981 (1981-09-08)
- D5: WO 96 11861 A (CHEVRON CHEM CO) 25 April 1996 (1996-04-25)
- D6: US-A-4 897 273 (IWATA KOU ET AL) 30 January 1990 (1990-01-30)
- D7: US-A-4 798 732 (OSAWA HIDE) 17 January 1989 (1989-01-17)
- D8: 'Additives for coffee to preserve aroma - comprise catalase, glutathione, sulphate, cysteine and antioxidant' DERWENT, XP002214128
- D9: DATABASE BIOSIS [Online] BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 8 May 2002 (2002-05-08) MORALES FJ, BABEL MB: 'Antiradical efficiency of Maillard reaction mixtures in a hydrophilic media' Database accession no. 200200317992 XP002268482
- D10: PATENT ABSTRACTS OF JAPAN vol. 2003, no. 02, 5 February 2003 (2003-02-05) & JP 2002 281948 A (KANEGAFUCHI CHEM IND CO LTD), 2 October 2002
- D11: SEMMELROCH P ET AL: 'ANALYSIS OF ROASTED COFFEE POWDERS AND BREWS BY GAS CHROMATOGRAPHY-OLFACTOMETRY OF HEADSPACE SAMPLES' LEBENSMITTEL WISSENSCHAFT UND TECHNOLOGIE, ACADEMIC PRESS, LONDON, GB, vol. 28, no. 3, 1995, pages 310-313, XP000602989 ISSN: 0023-6438

V.2 Novelty and inventive step

V.2.1 Document D1 discloses a method of stabilizing ground coffee by introducing a package containing oxygen absorbers, these including an alkali metal sulfite, into the packaging. Since the freshness, appearance and flavour of the coffee is maintained, it must be assumed that the effect thus achieved is the same as that obtained by the invention. Thus, the subject-matter of claims 1, 7, 8, 9, 10, 14-20, 21, 25 and 32 is not new (Art. 33 (2) PCT).

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V.2.2 Taking document D1 as the closest prior art, a man skilled in the art knows that anti-oxygen agents are efficacious in protecting coffee during storage, even in the absence of a direct contact between the coffee and the material, provided the material is present in the packaging. That objective can also be achieved using the alternative ways of introducing anti-oxygen compounds, especially sulfites, into the packaging before storage which are disclosed in documents D2-D6 (for further details, see the International Search Report). Thus, the subject-matter of claims 1, 2, 7-12, 14-20, 22, 25, 27-29, 31 and 32 is derivable from documents D2-D6 by a man skilled in the art having knowledge of D1, and therefore does not involve an inventive step in the sense of Art. 33 (3) PCT.

V.2.3 The subject-matter of the other examined claims is both new and involves an inventive step (Art. 33 (2-3) PCT).

V.3 The subject-matter of all claims is industrially applicable (Art. 33 (4) PCT).

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